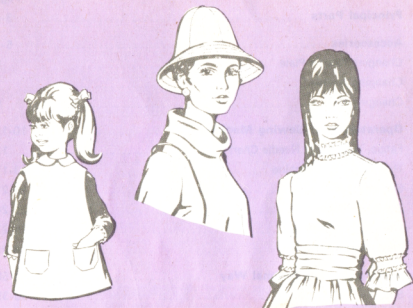


SINGER 514





SINGER[®] Service

Wherever you go you will find expert, dependable SINGER Service close at hand. SINGER will always assist you to keep your SINGER Sewing Machine properly functioning. For this reason you should always call your SINGER Sewing Centre or an Authorised SINGER Dealer's Shop if your sewing machine requires maintenance or repair. There you can obtain the services of a trained SINGER repair man, and warranted SINGER parts.

To ensure that you are always provided with the most modern sewing capabilities, The Singer Company reserves the right to change the appearance, design or accessories of this sewing machine when considered necessary.

†IMPORTANT ELECTRICAL INFORMATION

The wires in the mains lead are coloured in accordance with the following code:

Blue — Neutral (N)

Brown — Live (L)

As the colours of the wires in the mains lead of this appliance may not correspond with the coloured markings identifying the terminals in your plug, proceed as follows:

The wire which is coloured blue, must be connected to the terminal which is marked with the letter N or coloured black.

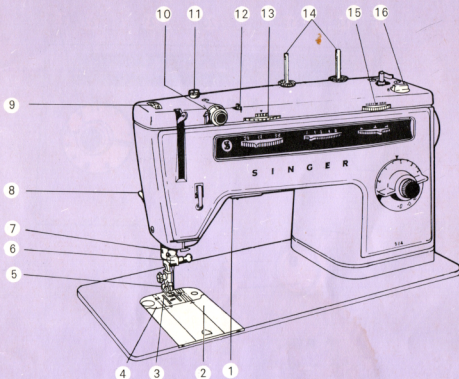
The wire which is coloured brown, must be connected to the terminal which is marked with the letter L or coloured red.

†Wire colours in the mains lead for Australia may be red Active (A) or Live (L) and black Neutral (N) and should be correspondingly connected.

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Principal Parts



1. Sewing Light

2. Slide Plate

3. Feed

4. Needle Plate

5. Presser Foot

6. Needle Clamp

7. Thread Cutter

8. Presser Foot Lifter

9. Pressure Dial

10. Tension Discs

11. Bobbin Winder Tension

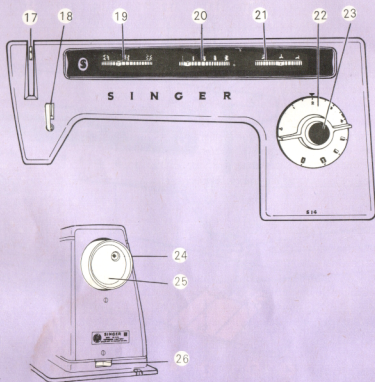
12. Thread Guide

13. Needle-Thread Tension
Dial

14. Spool Pin and Felt

15. *Flexi-Stitch* Dial

16. Bobbin Winder



17. Thread Take-up Lever

18. Thread Guide

19. Pattern Selector Dial

20. Stitch Width Dial

21. Needle Position Dial

22. Stitch Length/
Buttonhole Dial

23. Reverse-Stitch Push
Button

24. Hand Wheel

25. Hand Wheel Disc

26. Power and Light Switch

Accessories

... and when to use them


The accessories that come with your sewing machine will help you to sew with ease and comfort. They are simple to use and place an almost limitless variety of sewing effects at your fingertips.

The accessories shown in this instruction book are not necessarily furnished with your machine. Those that are not included are available for separate purchase at your Singer Sewing Centre.

General Purpose Fittings

The general purpose presser foot and needle plate are in place on the machine and can be used for either straight or zig-zag stitching. These fittings must be used when alternating between straight stitching and any kind of zig-zag stitching.

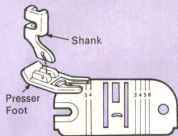
Straight Stitch Fittings

The straight stitch presser foot and needle plate are used only with the stitch width selector at 0 and the needle position selector at . Use these fittings for:

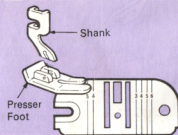
- Precision stitching of curved edges, top stitching, edge stitching, etc.
- Stitching delicate fabrics.

Feed Cover Needle Plate

The feed cover needle plate is used for free motion darning and embroidery and for sewing on buttons. It covers the feed so that the fabric does not move.



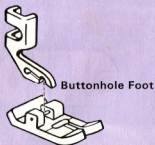
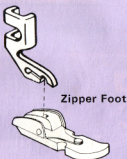
General Purpose Fittings



Straight Stitch Fittings



Feed Cover Needle Plate



Special Purpose Foot

The special purpose foot is designed for zig-zag stitching, buttonholing, and applique. The channel on the underside allows closely spaced zig-zag stitches to feed evenly.

Zipper Foot

This foot makes it easy to place stitching close to a raised edge. Thus, it is useful for corded seams as well as zipper insertions (page 40). The hinged foot easily rides over pins, heavy layers of fabric, or seams.

Buttonhole Foot

This foot is used to make 4-step bar tack buttonholes. The channels on the underside allow closely spaced zig-zag stitches to feed freely and permit buttonholes to be double stitched when extra strength is needed. Guidelines on the foot simplify buttonhole placement and make it easy to gauge buttonhole length.

Bobbins

The transparent bobbin shows thread supply at a glance.

One bobbin is in place in your machine. Extra bobbins are among your accessories.



Bobbin

Needles

Regular Needles (Catalogue 2020) for all-purpose sewing.

Yellow-Band Needles (Catalogue 2045) for sewing knits and stretch fabrics.

Twin Needle (Catalogue 2028) for decorative twin-needle stitching.



**Regular
Needle**
(Cat. 2020)



Yellow-Band Needle
(Cat. 2045)



**Twin
Needle**
(Cat. 2028)

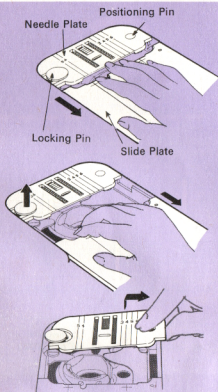
Blindstitch Hem Guide

The blindstitch hem guide, used with the general purpose foot, positions the hem fold in front of the needle for blindstitch hemming. To attach, simply loosen presser foot screw and slip the guide between presser foot screw and presser foot shank. The guide is then positioned over the left toe of the foot. For blindstitch hemming instructions, see page 46.

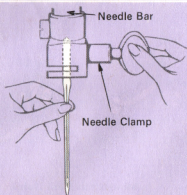


Blindstitch Hem Guide

CHANGING NEEDLE PLATE



CHANGING THE NEEDLE



Changing Needle Plates

1. Raise the presser foot.
2. Turn hand wheel toward you until the needle is above the presser foot.
3. Open slide plate as illustrated until bobbin is fully revealed.
4. Place fingers on edge of slide plate as illustrated and apply pressure to fully open the slide plate and release the locking pin.
5. Insert thumb under needle plate and withdraw needle plate to the right to remove.
6. Insert new needle plate under locking pin and locate on position pin. Fully close slide plate to lower the needle plate locking pin and secure the needle plate.

Changing the Needle

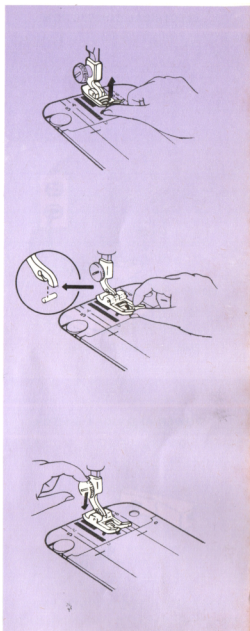
The needle clamp has been designed so that the needle can only be inserted one way—the correct way, with the flat side of the shank to the back.

1. Turn hand wheel toward you until needle is at highest position.
2. Loosen needle-clamp screw and remove needle.
3. Insert new needle in clamp with the *flat side of the needle* to the back and the long groove toward you; push it up as far as it will go.
4. Tighten needle clamp screw.

For regular sewing, this machine uses SINGER needles Catalogue 2020 (15x1), available in sizes 9, 11, 14, 16 and 18.

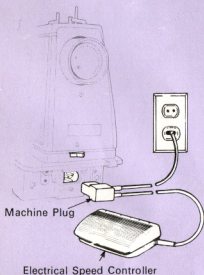
Changing Presser Feet

1. Raise the presser foot and make sure the needle is at its highest point.
2. With your thumb under the presser foot and your index finger at the back, tilt presser foot away from you and remove it.
3. Centre the new presser foot under the shank and hold it in position.
4. Lower the presser bar so that the front opening in the shank fits over the pin in the presser foot.
5. Press down on the presser foot screw until the foot snaps into place.

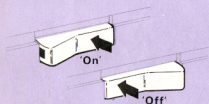


Operating your sewing machine

ELECTRICAL CONNECTIONS



POWER AND LIGHT SWITCH



Before plugging in your machine, be sure that the voltage and number of cycles indicated on the plate under the hand wheel conform to your electrical power supply.

CAUTION: Because of the up and down movement of the needle, you must work carefully and watch the sewing area when operating the machine. We recommend that you switch off the power and light before changing needles, presser feet and needle plates and when leaving the machine unattended. This eliminates the possibility of starting the machine by accidentally pressing the speed controller.

ELECTRIC DRIVE

- Raise the presser foot (the higher lifting position allows placement of bulky fabrics).
- Place material under the presser foot and lower presser foot.
- Insert machine plug into the receptacle at the right end of the machine, and connect the wall plug to the electrical outlet. Switch on the power and light. Start the machine by pressing down on foot controller. The speed of the machine is regulated by amount of pressure on foot controller.
- Practice operating machine (without thread) until you become accustomed to guiding material and regulating machine speed.

NOTE: Do not operate machine without material under presser foot as this may damage the feed and presser foot.

TREADLE DRIVE

- Loosen hand wheel knob.
- Place feet on treadle.
- Turn hand wheel over toward you and allow feet to move freely and lightly with motion of treadle.
- Practice this motion until you are able to re-start machine with hand wheel turning over toward you.
- Tighten hand wheel knob.
- For light, insert machine plug and connect wall plug. Switch on light.
- Place material under presser foot and lower the presser foot.
- Operate machine (without thread) until you become accustomed to guiding the material.
- **To disengage belt**—operate treadle and throw-off belt to the right.
- **To engage belt**—operate treadle with hand wheel turning toward you and guide belt on to band wheel.

NOTE: Belt tension should be only heavy enough to keep belt from slipping.

DUAL PURPOSE ELECTRIC/TREADLE DRIVE

Electric Drive

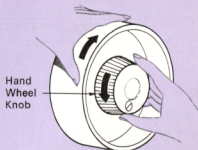
CAUTION: Before inserting machine plug and wall plug the belt for treadle drive must be disengaged as instructed above.

- Operate the machine as instructed for electric drive on page 10.

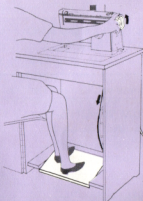
Treadle Drive

- Disconnect machine/controller plug from machine and wall plug from electrical outlet as shown. (If light connection is required a special light lead must be used—please consult your SINGER Sewing Centre.)
- Operate machine as instructed above.

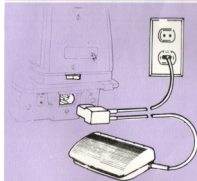
DISENGAGING HAND WHEEL



ENGAGING BELT DRIVE



DUAL-PURPOSE CONNECTIONS



FABRIC, THREAD, NEEDLE AND STITCH LENGTH TABLE

STRAIGHT STITCHING

Use the chart as a general guide; with the ever increasing development of synthetic fibres, all fabrics are not covered. We recommend as a golden rule to use a synthetic fibre thread to sew synthetic fibre fabrics and natural fibre thread to stitch natural fibre fabrics. Be sure to use the same size thread in both needle and bobbin.

FABRICS	THREAD SIZES	NEEDLE SIZES	STITCH LENGTH SETTINGS
DELICATE —tulle, chiffon, fine lace, silk, organdie.	Fine mercerized cotton, fine synthetic	9 (Cat. 2020)	1-1.5
LIGHTWEIGHT —lawn, organdie, voile, taffeta, silk, crepe, chiffon velvet, plastic film.	50 mercerized cotton, silk, fine synthetic	11 (Cat. 2020)	1.5-2 (2.5-3 for plastic)
SYNTHETIC KNITS AND STRETCH FABRICS —polyester double knit, nylon tricot, jersey, bonded fabrics, ciré, pannelé velvet, raschel.	50 mercerized cotton, silk, fine synthetic	14 (Cat. 2045)	1.5-2
MEDIUM WEIGHT —gingham, percale, pique, linen, chintz, faille, satin, fine corduroy, velvet, suitings, stretch fabric.	50 mercerized cotton, silk, fine synthetic, 60 cotton	14 (Cat. 2020)	1.5-2
MEDIUM HEAVY —gaberdine, tweed, sailcloth, denim, coatings, drapery fabrics, deep-pile fabrics.	Heavy-duty mercerized cotton, 40 to 60 cotton, synthetic thread	16 (Cat. 2020)	2-2.5
HEAVY —overcoatings, dungaree, upholstery fabrics, canvas.	Heavy-duty mercerized cotton, 24 to 40 cotton	18 (Cat. 2020)	2.5-3
ALL WEIGHTS —decorative top stitching.	Buttonhole twist†	18 (Cat. 2020)	2-4
LEATHERS —suede, kidskin, lined leather.	50 mercerized cotton or synthetic thread	11, 14, 16 (Cat. 2032)	2-4

†Use with No. 50 mercerized cotton thread or fine silk thread in bobbin.

Threading your sewing machine

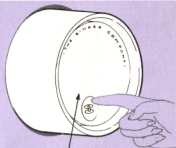
THE BOBBIN THREAD

Winding the Bobbin

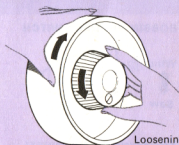
Always wind the bobbin before threading the needle.

1. Raise the presser foot.
2. Turn hand wheel toward you until needle is above the presser foot.
3. Disengage hand wheel by pressing bobbin symbol (Ⓑ) on hand wheel disc.
(For treadle drive, loosen the hand wheel knob.)

DISENGAGING HAND WHEEL



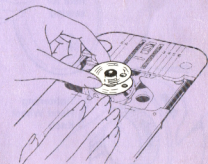
Hand Wheel Disc

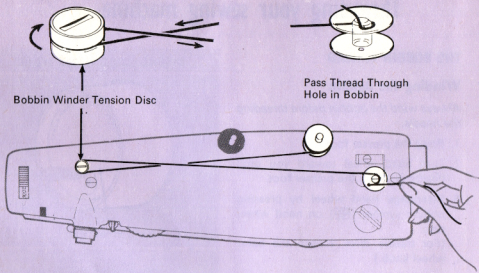


Loosening
Hand Wheel
Knob

REMOVING BOBBIN

4. Open slide plate with finger pressure as illustrated.
5. Lift out bobbin.
6. Fully close slide plate to make sure that needle plate is secure.

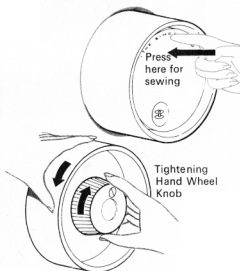




BOBBIN WINDER SWITCH



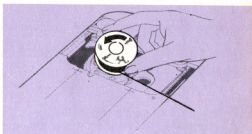
ENGAGING HAND WHEEL



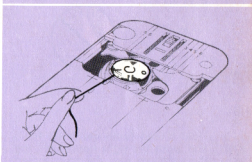
7. Place spool of thread on spool pin over the spool pin felt and lead thread around bobbin winder tension disc.
8. Pass thread, from the inside, through hole in bobbin and place bobbin on spindle.
9. Turn bobbin winder switch clockwise to "wind" position, hold thread end as shown and start the machine.
10. Cut off thread end after a few coils have been wound on the bobbin.
11. When required amount of thread has been wound (winding will stop when bobbin is full), turn bobbin winder switch counterclockwise to "sew" position and cut thread.
12. Press hand wheel disc for sewing or tighten the hand wheel knob.

Threading the Bobbin Case

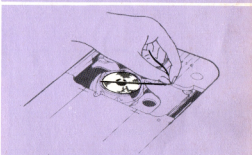
1. Raise the presser foot.
2. Turn hand wheel toward you until needle is above the presser foot.
3. Open slide plate.
4. Hold bobbin so that thread unwinds in direction shown, and insert bobbin in bobbin case.



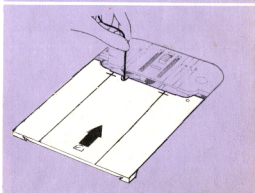
5. Pull thread into notch, draw it under tension spring, and into slot.



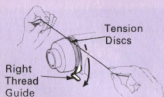
6. Draw about 10cm (4") of thread diagonally across the bobbin.



7. Fully close slide plate with the thread in slot between the needle plate and slide plate. Make sure that needle plate is secure.



THE NEEDLE THREAD



With two hands, slip thread horizontally between tension discs from the top.



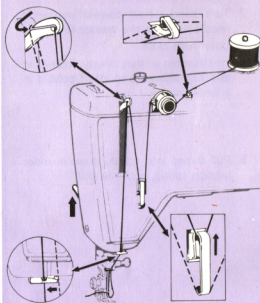
Hold thread firmly with left hand and, with the right hand, lead the thread down past the right thread guide and up to catch behind the guide.



With left hand lead thread over spring, pulling thread down in direction of arrow and under guide.



Allow the spring to return to its normal 'up' position and continue threading the machine.



Threading the Needle

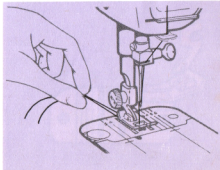
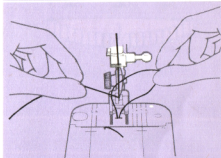
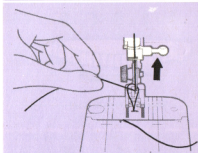
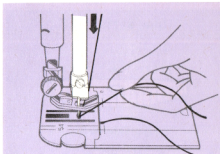
1. Raise presser foot to release the tension discs and turn hand wheel to raise the needle to its highest position.
2. Place spool of thread on spool pin over felt and lead thread through to points as shown, making sure to:—
 - Thread tension discs as illustrated.
 - Thread take-up lever from back to front, guiding thread down over top of lever and then up into eyelet.
 - Thread needle from front to back drawing about 10cm (4") of thread through eye of needle.

RAISING THE BOBBIN THREAD

Now that you have wound the bobbin and threaded the needle, you will need to raise the bobbin thread through the needle hole in the needle plate.

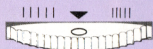
1. Hold needle thread lightly with left hand and turn hand wheel slowly toward you so that needle enters hole in needle plate.
2. Continue turning hand wheel and firmly hold needle thread until needle rises and brings up bobbin thread in a loop.
3. Undo the loop with your fingers.
4. Place both needle and bobbin threads under presser foot, and draw them toward the back of the machine.

... You are now ready to sew

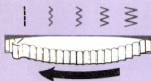


Straight stitching

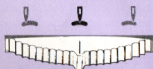
DIAL SETTINGS



Flexi-Stitch Dial

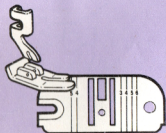


Stitch Width Dial



Needle Position Dial

ACCESSORIES



Flexi-Stitch Dial: 0

Stitch Width:

Needle Position:

Stitch Length: See page 19

Pressure: See page 21

Tension: See page 20

General Purpose or Straight Stitch
Presser Foot

General Purpose or Straight Stitch
Needle Plate

SETTING NEEDLE POSITION

Before you set your sewing machine for any kind of stitching, turn the hand wheel toward you until the needle is above the needle plate.

Check:

- That the *Flexi-Stitch* dial is set at 0.
- That the stitch length/buttonhole dial is *not* set at any of the four button-holing positions.

FITTINGS

Best sewing results will be obtained if you use the straight stitch presser foot and needle plate (see page 5). However, the general purpose presser foot and needle plate may also be used.

ADJUSTING FOR YOUR FABRIC

As you get ready to sew, take advantage of the versatility of your sewing machine. With a choice of needle sizes and three easy-to-use selectors for stitch length, pressure, and needle-thread tension, you can adjust the machine to sew perfectly on a wide variety of fabrics. The table on page 12 will guide you in selecting the correct thread, needle size and stitch length according to the weight of your fabric.

Adjusting Stitch Length

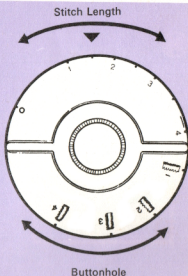
The stitch length dial controls the length of the stitch. It is graduated from 0-4: the *higher* the number, the longer the stitch.

Generally, shorter stitches are best for lightweight fabric; longer ones for heavy fabric. The area between 1 and 0 is used for zig-zag satin stitching only.

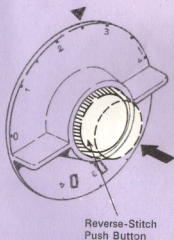
Setting Selector

- Turn dial so that the stitch length desired is positioned under the arrow-head ▼ on the control panel.
- To *shorten* the stitch, turn dial to the right.
- To *lengthen* the stitch, turn dial to the left.

STITCH LENGTH DIAL

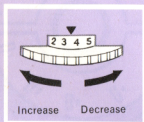
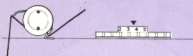


REVERSE STITCHING



For reverse stitching, press the reverse-stitch push button in as far as it will go and hold in place (the button can be pushed in while the machine is sewing). Release pressure on the push button to return to forward stitching.

NEEDLE-THREAD TENSION



Adjusting Needle-Thread Tension

Set needle-thread tension according to the type of fabric you use. The numbers eliminate guesswork in duplicating settings.

Correct tension is important because too much or too little will weaken your seams or cause your fabric to pucker. Set tension dial between 4 and 5. Make a test sample with the fabric and thread you plan to use and examine it. A perfect stitch will have the needle and bobbin threads locked between the two layers of fabric with no loops on top or bottom and no puckers.

If stitches look loose, increase needle-thread tension. If the fabric puckers, decrease tension.

- To *increase* tension, turn dial to a higher number.
- To *decrease* tension, turn dial to a lower number.



Too Tight

Too Loose



Correct

Adjusting Pressure

The pressure dial regulates the pressure that the presser foot exerts on the fabric. Correct pressure is important because it enables the fabrics to feed smoothly and evenly without being marred. The NORM (Normal) setting is an all purpose setting which can be used for a wide variety of fabrics of different weights and textures. Intermediate settings, above and below NORM (Normal) setting are also provided. When you need extra control to sew, regulate the pressure to heavier or lighter pressure to suit the fabric being used.

- # denotes the setting for darning.

Lower the presser foot before setting pressure.

- To *increase* pressure, turn dial from NORM setting towards MAX.
- To *decrease* pressure, turn dial from NORM setting towards #.

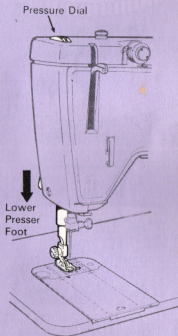
ADJUSTING PRESSURE DIAL



To Increase

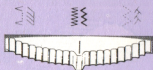


To Decrease

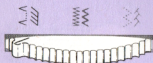


Zig-zag stitching

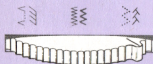
DIAL SETTINGS



Plain Zig-Zag Stitch



Blindstitch

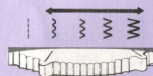


Multi-Stitch Zig-Zag

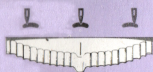
Pattern Selector



Flexi-Stitch Dial



Stitch Width



Needle Position

Pattern Selector: See below

Flexi-Stitch Dial: 0

Stitch Width:

Needle Position:

Stitch Length: See page 23

Pressure: See page 21

Tension: See page 23

General Purpose Presser Foot

General Purpose Needle Plate

With your sewing machine you can do three kinds of zig-zag stitching: plain zig-zag, blindstitch and multi-stitch zig-zag.

SETTING PATTERN SELECTOR

Set the stitch width dial on before turning the pattern selector.

For Plain Zig-Zag Stitching

- Move selector to

For Blindstitching

- Move selector to

For Multi-Stitch Zig-Zag Stitching

- Move selector to

SETTING STITCH WIDTH AND NEEDLE POSITION

Always raise the needle above the needle plate and fabric before changing the stitch width or needle position.

Move the stitch width dial from its straight stitch position to any zig-zag setting.

Most of your zig-zag stitching will be done at centre needle position; left and right settings are used for special stitching as in buttonholing, button sewing and twin-needle work.

SETTING STITCH LENGTH AND NEEDLE-THREAD TENSION

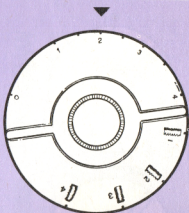
Make a test sample with the fabric and thread you plan to use so that you can adjust your stitch length and needle-thread tension properly. If you need to adjust pressure, see page 21.

Stitch Length

Any stitch length setting from 4 to 1 will give you an open zig-zag stitch of whatever pattern you select. The higher the number, the more open, or farther apart your stitches will be.

The area between 1 and 0 is used for the adjustment of closed zig-zag, or satin stitching, and is explained on page 24.

STITCH LENGTH



Stitch Length Dial

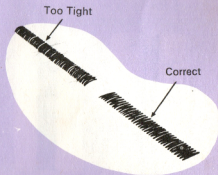
NEEDLE-THREAD TENSION



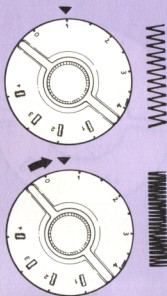
Needle-Thread Tension

Zig-zag stitching requires less tension than straight stitching. Notice the stitching on your test sample. The stitches should lie flat against the fabric without being too taut or without causing the fabric to pucker.

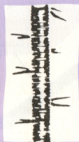
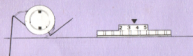
If the stitches are not flat lower the needle-thread tension by turning the dial to a lower number.



STITCH LENGTH



TENSION



Incorrect



Correct

SATIN STITCHING

Satin stitching is accomplished by sewing a zig-zag stitch with the stitch length selector in the area between 1 and 0. As the selector is turned clockwise the stitch length diminishes to zero. For best results the special purpose presser foot should be used.

Soft fabrics may require a backing such as crisp organdie or lawn to ensure firm satin stitching.

Pattern Selector: 

Flexi-Stitch Dial: 0

Stitch Width: 

Needle Position: 

Stitch Length: 1-0

Pressure: Light

Tension: See below

Special Purpose Presser Foot

General Purpose Needle Plate

Stitch Length

1. Turn stitch length selector to 1.
2. Run the machine at a slow speed.
3. Turn stitch length selector slowly in clockwise direction until stitches are closely spaced and form a smooth surface.

Tension Adjustment

Satin stitching generally requires even less tension than open zig-zag stitching. Furthermore, the wider the satin stitch, the lighter the tension must be. Thus, maximum stitch width setting requires the least tension. Make a test sample and lower the tension on your needle thread as required.

Flexi-Stitch sewing

Pattern Selector: See below

Flexi-Stitch Dial: Red bar

Stitch Width: 

Needle Position: 

Stitch Length: Red bar

Pressure: See page 21

Tension: See page 26

General Purpose Presser Foot

General Purpose Needle Plate

Speed: Moderate

With your sewing machine you can produce three kinds of *Flexi-Stitch*: ric-rac stitch, slant overedge stitch and faggoting stitch.

Always use moderate speed when sewing a Flexi-Stitch pattern.

SETTING PATTERN SELECTOR

Set the stitch width dial on  before turning the pattern selector.

For Ric-Rac Stitch

- Turn selector to 

For Slant Overedge Stitch




- Turn selector to 

For Faggoting Stitch

- Turn selector to 

SETTING STITCH WIDTH AND NEEDLE POSITION

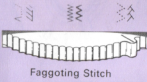
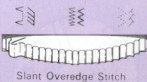
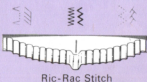
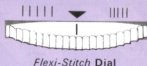
Always raise the needle above the needle plate and fabric before changing the stitch width.

Turn the stitch width dial from its straight stitch position  to any setting between  and .

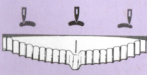
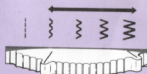
Most of your *Flexi-Stitch* sewing will be done at centre needle position; left and right settings are used for special stitching.

For straight stretch stitch, turn the stitch width dial back to .

DIAL SETTINGS



Pattern Selector



DIAL SETTINGS



Too Tight

Correct



ADJUSTING NEEDLE-THREAD TENSION

Some *Flexi-Stitch* patterns require more needle-thread tension than others. Make a test sample with the fabric and thread you plan to use so that you can adjust tension to suit the stitch you have chosen. Set the tension dial on 3 or 4 for your test sample. Examine the stitching. If the fabric puckers, decrease tension by turning the dial to a lower number.

SETTING STITCH LENGTH DIAL

When you use a *Flexi-Stitch* pattern, stitch length is controlled with a single setting of the stitch control dial. Simply rotate it until the **red bar** is under the arrowhead above the dial.



Incorrect

Correct



Incorrect

Correct

ADJUSTING STITCH BALANCE

You may need to adjust the *Flexi-Stitch* dial in order to balance the pattern (see illustration).

Before you move the *Flexi-Stitch* dial from its neutral position (red bar at centre), make a test sample. If adjustment is required, stitch slowly and move the dial as you sew.

- Turn the dial to the right to bring stitches of the pattern together.
- Turn the dial to the left to separate stitches of the pattern.

SEWING KNIT AND STRETCH FABRIC

When you sew stretch fabrics, choose one of the stitch patterns that sew stretch into the seam. Four varieties of stitches are available; so you can choose just the right one for your fabric and sewing job.

For best results, use a SINGER yellow-band needle (Catalogue 2045) with suitable synthetic or mercerised thread and increase presser bar pressure when you attach elastic or sew synthetics or knits.

	Stitch	Where to Use
	Straight Stretch Stitch Width	Plain seams that s-t-r-e-t-c-h (press-open or closed construction) — Crotch seaming — Sleeve and gusset insertion — Flexible top-stitching — Swim and ski suit construction — Attaching patch pockets — Repairing and reinforcing seams.
	Faggoting Stitch	Swimsuit seams — Attaching stretch lace — Lingerie and girdle seams.
	Slant Overedge Stitch	Picot edging — Attaching lace and applique.
	Rio-Rio Stitch	Heavy-duty, all-purpose stretch sewing — Reversible top-stitch applications.

GUIDING AND SUPPORTING FABRIC

Most fabrics of stretch or knit construction need only to be guided in front of the presser foot when you use one of the stretch stitches. Simply let the machine move the fabric to make stitches that give s-t-r-e-t-c-h to seams. Some fabrics, however, require support while being stitched:

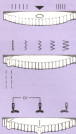
- For synthetic knits, apply gentle tension by holding seam in front and back of the presser foot as you sew.
- For elasticised fabric, nylon tricot, stretch lace, and knits with an unusual amount of elasticity, apply *firm* tension in front and back of the presser foot to stretch the seam while stitching.

GUIDING AND SUPPORTING FABRIC

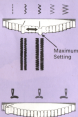


Twin-needle stitching

STRAIGHT STITCHING



ZIG-ZAG STITCHING



By using the twin needle you can produce two parallel, closely spaced, decorative lines of stitching simultaneously. You can use either one or two colours of thread; and you can choose a straight stitch or a zig-zag stitch setting.

SETTING THE MACHINE

Straight Stitching

Flexi-Stitch Dial: 0

Needle Position:  or  only

Stitch Width:     

Stitch Length: To suit fabric

General Purpose Presser Foot

General Purpose Needle Plate

Zig-Zag Stitching

Pattern Selector: Desired Pattern

Flexi-Stitch Dial: 0

Needle Position:  only

Stitch Width:     

Stitch Length: Optional

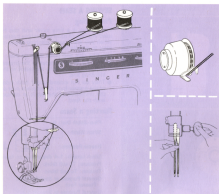
Presser Foot: General Purpose

(open patterns)

Special Purpose

(satin stitch)

General Purpose Needle Plate



Use SINGER twin needle, Catalogue 2038 (size 14).

INSERTING THE TWIN NEEDLE

Before inserting the twin needle make sure you are using the general purpose needle plate and that the needle position dial is set at **L** and the stitch width dial is set mid-way (or less). To insert the twin needle, simply raise needle to highest point, loosen the needle clamp screw. Remove single needle and insert the twin needle in its place. Tighten needle clamp screw securely.

THREADING

For best results, use No. 50 mercerized cotton thread.

Thread the machine in the same manner as for single-needle stitching except:

1. Be sure that threads are separated by centre tension disc as they pass around assembly.
2. Carry only one thread through the last thread guide before the needle.

Sewing the professional way

SEWING A SEAM



Pins Placement

SEWING A SEAM

Pin Basting

Pin basting is a time saver and can be used in place of hand or machine basting when you are straight stitching seams in easy-to-handle fabric.

Use fine pins and place them so that:

- They are at right angles to the presser foot and just nip into the fabric at the stitching line.
- They do not extend under both sides of the presser foot. *Never place pins on the underside of the fabric in contact with the feed.*

Starting a Seam

Press-Stitch Dial: 0

Stitch Width:

Needle Position:

Stitch Length: 1-4 depending on fabric

Pressure: To suit fabric

Tension: To suit fabric

General Purpose or Straight Stitch

Presser Foot

General Purpose or Straight Stitch

Needle Plate

1. Pin seam edges together and baste if necessary.
2. Select stitch length.
3. With presser foot up, align fabric with appropriate seam guideline on needle plate (as described on the following page). Position needle in fabric about 1cm ($\frac{1}{2}$ ") from the edge.
4. Lower presser foot, depress push button and hold in this position for reverse.
5. Backstitch to edge of material for reinforcement.
6. Release push button for forward stitching, and stitch.

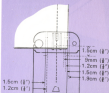
Starting a Seam

Keeping the Seam Straight

As you stitch, use one of the numbered lines on the needle plate as a guide for keeping the seams straight.

If you want a 1.5cm ($\frac{3}{8}$ ") seam, for example, line up your fabric with right or left guidelines 5, which are extended on the slide plate for your convenience.

USING GUIDELINES



HOLDING THE FABRIC



Guiding Fabric



Supporting Fabric

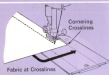
Guiding and Supporting the Fabric

Most fabrics need to be guided in front of the presser foot only, as shown.

Some fabrics, however, require support while being stitched:

- For filmy sheers, for example, apply gentle tension by holding seams in front and back of the presser foot.
- For stretch materials, see special instructions on page 27.

PIVOTING AT CORNER



Fabric at Crosslines



Fabric after Turning

ENDING A SEAM



Turning Square Corners

To turn a square corner 1.5cm ($\frac{3}{8}$ ") from the fabric edge, you need not measure or mark the seam. Simply use the crosslines on the slide plate.

- Line up your fabric with right or left guideline 5 on the needle plate. Stitch seam, slowing speed as you approach corner.
- Stop stitching, with the needle down, when the bottom edge of the fabric reaches the cornering crosslines on the slide plate.
- Raise presser foot and turn fabric on needle, bringing bottom edge of fabric in line with guideline 5.
- Lower the presser foot and stitch in new direction.

Ending a Seam

1. Stitch to the fabric edge. Depress fully reverse push button and hold in place; backstitch approximately 1cm ($\frac{1}{2}$ ") to reinforce end of seam. Release push button.
2. Turn hand wheel to bring needle to its highest point.
3. Raise presser foot and remove fabric by drawing straight back.
4. Cut threads on thread cutter at rear of presser bar.

SEAMING AND FINISHING

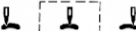
Ladder Seams

A ladder seam made with blindstitching is functional and decorative at the same time. Particularly appropriate for knit and stretch fabrics, the blindstitch provides stretchable, decorative construction seams, and edge finishes for necklines, pockets and collars in sportswear and swimwear.

Pattern Selector: 

Flexi-Stitch Dial: 0

Stitch Width: 

Needle Position: 

Stitch Length: 1-1.5

Pressure: Light

Tension: Light

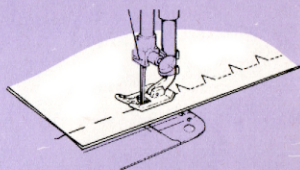
General Purpose Presser Foot

General Purpose Needle Plate

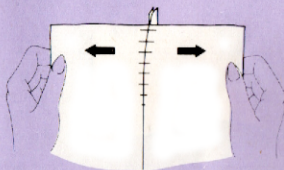
1. Make a test sample first to adjust thread tension and stitch length to suit your fabric. Needle thread tension should be *lighter* than normal.
2. Cut and fit garment allowing for 1.5cm ($\frac{5}{8}$ ") seam allowance. Baste seam line.
3. Place stitching so that the *straight stitches* of the blindstitch pattern fall on the seam line.
4. After stitching, open seam by pulling fabric back on opposite sides of seam to produce ladder effect. Press seam allowances of construction seams to one side. Seam allowances of enclosed seams are pressed together in the usual way after seam has been opened.

LADDER SEAMS

Blindstitching
Ladder Seam





Opening Seam to
Form Ladder Effect



SEAMS

Plain Stretch Seams

Pattern Selector: Any setting

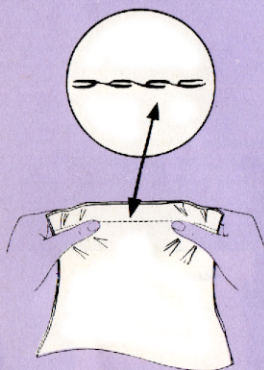
Flexi-Stitch Dial: Red bar Stitch Width: Needle Position: Stitch Length: Red bar 

Tension: To suit fabric

General Purpose Presser Foot

General Purpose Needle Plate

Speed: Moderate




When you use the straight stretch stitch to seam knit, stretch, and elasticized fabric, *s-t-r-e-t-c-h* and strength are sewn into the seam.

Because it is equally useful for closed or press-open seam construction and will not break thread under stress, the straight stretch stitch is also good for seams that receive an unusual amount of strain when worn. For example: crotch seaming, sleeve insertion, and construction seams in sportswear and bathing suits.






Procedure:

1. Make a test sample to determine thread tension and stitch balance. Be sure to insert a yellow-band needle in machine if you are stitching a synthetic knit fabric.
2. Stitch and guide fabric as you do for plain seams stitched with the regular straight stitch, letting the machine make the back-and-forth stitches that give *s-t-r-e-t-c-h* to the seam. If fabric has an unusual amount of elasticity, it should be stitched under tension as instructed on page 27 (Guiding and Supporting Fabric).
3. Press seam in the usual way.


Stretch Seaming

Pattern Selector: 

Flexi-Stitch Dial: Red bar 

Stitch Width:     

Needle Position:   

Stitch Length: Red bar 

Pressure: To suit fabric

Tension: To suit fabric

General Purpose Presser Foot

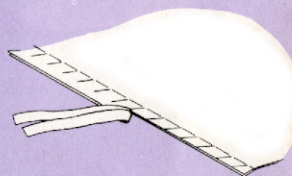
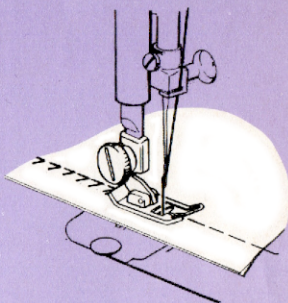
General Purpose Needle Plate

Speed: Moderate

When the garment construction requires a full 1.5cm ($\frac{5}{8}$ ") seam allowance this method of stretch seaming is ideal. Specially suitable for bulky knits, fine tricot and fabrics that curl or fray easily.

Remember to use a yellow-band needle in the machine when you sew a synthetic knit fabric.

1. Make a test sample before beginning garment construction to determine machine adjustments. Be sure to duplicate the cut of the garment seam in your test.
2. Cut and fit the garment allowing for a 1.5cm ($\frac{5}{8}$ ") seam allowance. Baste seam line.
3. Place the work under the presser foot to the *right* of the needle, using guideline 5 to the left of the needle as a guide.
4. If the seam allowance is not needed to support the garment, trim away excess turnings.

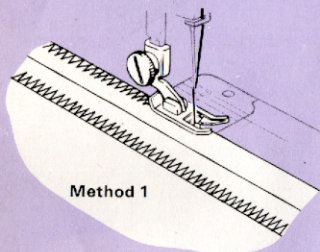



Trimming Seam Edges

Seam Finishes

After you have stitched your seams and pressed them open, you may, particularly if your fabric frays, wish to oversew the edges.


There are several methods, some of which are contained in this and the following pages.



Pattern Selector: 

Flexi-Stitch Dial: 0

Stitch Width: 

Needle Position: 

Stitch Length: 1-1.5

Pressure: To suit fabric

Tension: To suit fabric

General Purpose Presser Foot

General Purpose Needle Plate

1. Make a test sample first to determine which method best suits the fabric. Also adjust stitch width and length to suit the fabric. Choose the settings that will give you the most "open" stitch and secure the fabric edges without giving a harsh finish.
2. Trim seam edges evenly.
3. Place the type of stitching you have chosen on the seam allowance, as illustrated.

Method 1

This method is suitable for medium and heavier weight fabric. The stitching comes to the edge of the seam allowance, as illustrated.

Method 2

This method is suitable for finer fabrics which are inclined to curl or fray.

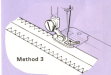
Set stitch width and stitch length to suit fabric and place the seam allowance under the presser foot with the edge of the seam in line with the side of the presser foot as illustrated. Trim the fabric to the stitch line.



Method 3

This method can be used on most types of fabric and gives a very flat finish to seam edges.

The stitching comes to the edge of the seam allowance, as illustrated.



Method 4

Pattern Selector:  or 

Flex-Stitch Dial: 0

Stitch Width: To suit fabric

Needle Position:   

Stitch Length: 2.5-3

Pressure: To suit fabric

Tension: To suit fabric

General Purpose Presser Foot

General Purpose Needle Plate

Seam edges support the garment and should be reinforced if the fabric is likely to fray.

1. Make a test sample first to determine whether zig-zag stitch or blindstitch best suits your fabric. Also adjust stitch length and stitch width to suit fabric. Choose the settings that will give you the most "open" stitch that will secure the fabric edges; avoid harsh, over-stitching.
2. Trim seam edges evenly.
3. Place stitching near the edge of the seam allowance or over the raw edge as illustrated.

Lingerie Seams

Pattern Selector: 

Flex-Stitch Dial: 0

Stitch Width:    

Needle Position:   

Stitch Length: 1-1.5


Pressure: To suit fabric

Tension: To suit fabric

General Purpose Presser Foot

General Purpose Needle Plate

To make a lingerie seam both durable and flexible, use a plain zig-zag stitch. This treatment is particularly suitable for bias seams.

1. Straight-stitch the seam (with stitch width at ) on wrong side.
2. Press both seam allowances in the same direction.
3. From the right side, top-stitch with zig-zag pattern (with stitch width at ), letting the needle alternately enter the seam line and seam thickness.

Method 4

LINGERIE SEAM

DARTS

Darts can be made in the usual way on your sewing machine. Begin stitching at the wide end of the dart, reversing if suitable as you would at the end of a seam. Stitch to the point and either reverse for 3mm (1/8") or tie the ends of the thread depending on the thickness of your fabric.

Flex-Stitch Dial: 0

Stitch Width:     

Needle Position:   

Stitch Length: To suit fabric

Pressure: To suit fabric

Tension: To suit fabric

General Purpose or Straight Stitch
Presser Foot

General Purpose or Straight Stitch
Needle Plate

REGULAR DARTS



STEPS IN MAKING A DART IN INTERFACING

Pattern Selector:    

Flex-Stitch Dial: 0

Stitch Width:    

Needle Position:   

Stitch Length: To suit fabric

Pressure: To suit fabric

Tension: To suit fabric

General Purpose Presser Foot

General Purpose Needle Plate

Step 1 Step 2



Step 3



Interfacings can be shaped without bulk with zig-zag stitching.

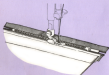
Make a test sample to determine whether plain zig-zag or multi-stitch zig-zag best suits your purpose.

1. Cut out the dart allowance on the stitching line.
2. Bring raw edges together and pin over a muslin stay.
3. Stitch, backstitching at both ends.

ADJUSTING THE ZIPPER FOOT

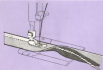
Zigzag Food to
Left of Middle

Zipper Foot to Right and Left



Discussion

online



TIPPLES AND COBBLING

Tippen

There are many different kinds of zippers. Your zipper package will contain easy-to-follow instructions. Using the zipper foot, you will find it easy to sew a straight line of stitching close to either side of the zipper.

File not found: /lib - 0

Stretch Width:

Neck Position:   

Switch Length = To multi-table

Pressure: To suit fabric

Transfer: To send letters

Figure 1 consists of two bar charts, (a) and (b), showing the percentage of respondents for different levels of agreement with the statement 'The government should do more to protect the environment'.

Chart (a) shows the percentage of respondents for different levels of agreement with the statement 'The government should do more to protect the environment'.

Level of Agreement	Percentage of Respondents
Strongly agree	15%
Agree	45%
Disagree	25%
Strongly disagree	15%

Chart (b) shows the percentage of respondents for different levels of agreement with the statement 'The government should do more to protect the environment'.

Level of Agreement	Percentage of Respondents
Strongly agree	20%
Agree	50%
Disagree	20%
Strongly disagree	10%

General Purpose or Straight Stitch

When the zipper is to the right of the needle:

1. Before attaching the zipper foot slide the adjusting block to the left.
2. Snap on the zipper foot, see page 9.
3. Check the position of the foot by lowering the needle into the side notch of the foot, making sure it clears the foot.

When the zipper is to the left of the needle, adjust the foot to the right of the needle in the same way.

Cordine

The zipper foot can be used to make cording for slip covers, etc. Cover a cord with a strip of bias fabric and sew as shown.

Buttonholes

Buttonhole Position

Accurate guidelines are essential to keep buttonholes a uniform distance from the faced edge of the garment, evenly spaced, and on the grain of the fabric. For centre closures, place guidelines as follows:

1. Mark the centre line of the garment as indicated on your pattern. This guideline can be hand basted and should follow a lengthwise fabric thread.
2. Mark a position guideline for each buttonhole.

- *Horizontal* buttonholes are placed to extend 3mm ($\frac{1}{8}$ ") beyond the centre-line basting of the garment. Horizontal guidelines for the buttonholes should follow a crosswise thread of the fabric and, if basted, be longer than the finished length of the buttonhole. Determine the length of the buttonhole (as described below) and mark ends of each buttonhole vertically.

- *Vertical* buttonholes are placed so that the centre-line basting of the garment is in the centre of the buttonholes. Determine buttonhole length and mark ends of each buttonhole horizontally across the centre line and use the centre-line basting as a buttonhole guide when stitching.

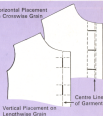
Buttonhole Length

First, decide how long the button opening must be, then, add 2mm ($1/16$ ") to the measurement for each bar tack (the closing stitches at each end of the buttonhole).

To find the length of the button opening, cut a slit in a scrap of fabric the diameter of the button you intend to use. Increase length of opening until button slips through easily.

BUTTONHOLE POSITION

Horizontal Placement
on Crosswise Grain



BUTTONHOLE LENGTH

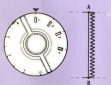
Buttonhole
Length Guide
Markings

Length of
Button
Opening

Buttonhole
Stitching



STITCHING BUTTONHOLES



Buttonholes made with the Built-in Four-Step Buttonholer

Pattern Selector: 
 Flexi-Select Dial: 0
 Stitch-Density: 
 Balance Line: Neutral (page 44)
 Pressure: To suit fabric
 Tension: To suit fabric
 Buttonhole Presser Foot
 General Purpose Needle Plate

The four dial settings for buttonholing are located on the stitch length selector dial. As you turn the dial for each step, your machine is automatically set for the correct needle position, stitch width, stitch length and stitching direction. Do not turn the fabric during buttonholing.

Always raise the needle above the fabric before turning the buttonhole dial.

Always make a test buttonhole on a sample of your fabric. Be sure to duplicate the thickness of the garment and include interfacing. If the two lines of stitching in your sample are of unequal density, see page 44.

Procedure

Step 1: Side Stitching

Turn the buttonhole dial clockwise to step 1 (aligning it with the arrowhead above the dial). Holding the ends of the thread, turn hand wheel towards you until the needle is in the centre position and above the presser foot.

Place the work under the buttonhole foot; align centre marking of buttonhole with centre red line on the foot, and align the end marking of buttonhole with the horizontal red line on the foot. Do not lower the needle.

Position needle in fabric at point A. Lower the foot and stitch to the end of the buttonhole (point B). The end marking should be aligned with the horizontal red line on the foot.

Step 2: Bar Tack

Raise the needle above the fabric by turning the hand wheel toward you.

Turn the buttonhole dial counter-clockwise to step 2. Take four or six stitches (point C).

Step 3: Side Stitching

Raise the needle above the fabric.

Turn buttonhole dial counter-clockwise to step 3. Stitch to within a few stitches of the end of the buttonhole (point D).

Step 4: Bar Tack

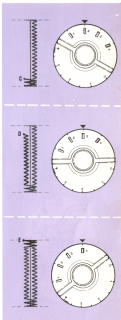
Raise the needle above the fabric.

Turn buttonhole dial counter-clockwise to step 4. Take four or six stitches (point E).

Some fabrics require a heavier buttonhole in which case, following the same procedure, stitch around the buttonhole twice. When stitching the second time, it is not necessary to reposition your garment.

Remove the work, draw threads to the underside, tie, and trim.

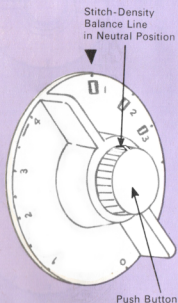
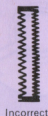
Use a pair of small, sharp scissors to cut the button opening. Insert blade in centre of buttonhole cutting space and cut from this point in either direction. Place a pin across the cutting space at each end of the buttonhole to protect bar tacks.



BALANCING THE TWO LINES OF STITCHING

On different kinds of fabric, there may be a difference in the density of the stitches on the right and left sides of the button-hole. This is easily adjusted by turning the push button to balance the stitching; a very slight turn will produce a noticeable change.

- Begin with the stitch-density balance line in a neutral position (aligned with arrowhead above dial).
- Turn the push button to the left to increase the density of the stitches on the left and decrease on the right.
- Turn the push button to the right to increase the density of the stitches on the right and decrease on the left.



Buttons

Pattern Selector: 

Flexi-Stitch Dial: 0

Stitch Width: as required

Needle Position:   




General Purpose Presser Foot

Feed Cover Needle Plate

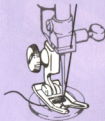
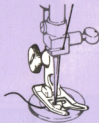
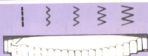
Flat buttons can be sewn on quickly and easily using plain zig-zag.

The space between the holes in the button determines stitch width settings.

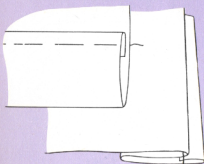
Ensure that stitch length selector dial is NOT set at any of the four buttonholing positions.

1. Insert feed cover needle plate and turn *Flexi-Stitch* dial to 0.
2. Set stitch width at  and needle position selector at . Position button under foot and lower the needle into the centre of the left hole. Lower the foot. Turn hand wheel toward you until needle rises out of button and is above the foot.
3. Turn stitch width dial until needle is over the other hole in the button. Then, when you begin to stitch, the needle should enter into the *right* hole of the button. Take six or more zig-zag stitches to attach button. End on left side.
4. To fasten stitching, adjust stitch width to  and take three or four stitches.

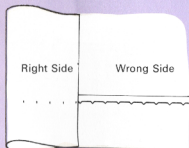
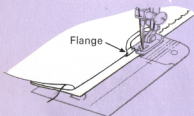
STITCH WIDTH



BLINDSTITCHING HEM



Turn and Press Hem



HEMS

Blindstitch Hems

Pattern Selector:

Flexi-Stitch Dial: 0

Stitch Width:

Needle Position:

Stitch Length: 1.5-2.5

Blindstitch Hem Guide

Pressure: To suit fabric

Tension: To suit fabric

General Purpose Presser Foot

General Purpose Needle Plate

Blindstitching provides a durable hem finish that can be used on a variety of light and medium weight fabrics. It is best suited to straight hems. Taped, bound, turned, or unfinished hem edges can be blindstitched with equal ease. Blindstitching takes a little practice, however, so make a test sample first.

1. Raise presser foot, loosen presser foot screw, and slip blindstitch hem guide between the screw and the shank of the general purpose presser foot. Make sure the underside of the guide clears the slide plate and the front of the presser foot. Tighten screw.
2. Mark, turn, and press hem in the usual way. Baste the turned hem to hold it in place. Place the basting at least 1 cm ($\frac{1}{2}$ ") below the top edge of the hem.
3. With the work wrong side up, turn the hem under, thus forming a soft fold about 5mm ($\frac{1}{8}$ ") from the top edge of the hem. Press lightly.
4. Position the hem under the presser foot with the soft fold resting against the wall of the hem guide. Make sure the flange of the hem guide is between the soft fold and top of hem.
5. Lower the presser foot and stitch so that the straight stitches fall on the hem edge and the sideward stitches pierce the soft fold. While stitching, guide the hem edge in a straight line and feed the soft fold evenly against the wall of the hem guide.

HEMSTITCHING

A touch of quiet elegance is added to table and bed linens when hems are finished with slant overedge stitch. This type of hemstitching is effective when used on firm, plain-weave fabrics such as lawn or organdie, or fabrics from which threads can be drawn readily, such as linen.

Slant Overedge Hemstitching

Pattern Selector:



Flexi-Stitch Dial: Red bar

Stitch Width:



Needle Position:



Stitch Length: Red bar

Pressure: Light

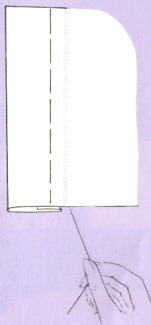
Tension: To suit fabric

General Purpose or Special Purpose

Presser Foot

General Purpose Needle Plate

Speed: Moderate

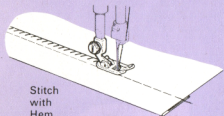


Draw Out Threads

Procedure:

1. Insert a size 18 needle and thread the machine with a fine cotton, silk, or synthetic thread.
2. Turn edge of fabric over twice to make hem of desired width. Fold and press on lengthwise or crosswise thread of fabric. Baste in place.

SLANT OVEREDGE HEMSTITCHING



Stitch
with
Hem
Toward
Left

3. Draw out 2 to 4 threads just above top edge of hem. The number of threads drawn will depend on the texture of the fabric and the depth of the open work desired. (If threads cannot be drawn, mark or baste a guideline on the right side of fabric.)
4. Place work, right side up, under presser foot *with the hem toward the left*.
5. Lower the presser foot and stitch, guiding the hem edge under the needle so that the straight stitches are made in the drawn-thread channel (or through the single thickness of fabric) and the sideward stitches (or points) *in the hem*.



Mitred Corner



Double
Overlapped Corner

Turning a corner

Hems in household linens are usually mitred at the corners, but they may also be turned with a double overlap and stitched from edge to edge. If corners are mitred, work should be pivoted on the needle at the inside point of the mitre. To pivot, leave the needle in the fabric at the corner, making sure your last stitch is a straight stitch before a zig-zag (or sideward) stitch.



Hemstitched Corner

Finishing touches

FAGGOTING

Pattern Selector: 

Flexi-Stitch Dial: Red bar 

Stitch Width: 

Needle Position: 

Stitch Length: Red bar 

Pressure: Light

Tension: To suit fabric

General Purpose Presser Foot

General Purpose Needle Plate

Speed: Moderate

The art of joining two pieces of fabric with an open, lacy decorative stitch is called faggoting. You can create this attractive trimming with the faggoting stitch. Use it for decorative stretch seams in swimsuits or for joining strips of fabric to make an entire garment section.

- Turn under (and hem by slipstitching) the raw edges of the fabric strips or seams to be joined. Press flat.
- It may be found easier to baste pieces to be joined on to tissue paper, leaving a space and stitching as follows.
- Stitch, guiding the two fabric edges under the centre of the presser foot, leaving a space (about edges for bathing suit seams). Allow the needle to alternately make a stitch in each fabric strip and two stitches in the centre of the opening. Remove tissue paper.

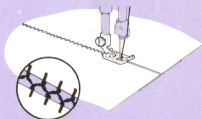
PATCHWORK QUILTING

Patchwork for quilts and wearing apparel can be quickly "pieced" and decorated at the same time by using the faggoting stitch.

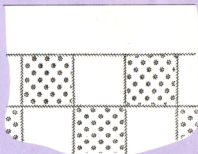
Procedure:

1. Cut a fabric underlay to size. (Baste a light layer of padding to underlay if a quilted effect is desired.)
2. Prepare patches, turning under 7mm ($\frac{1}{4}$ ") seam allowance.
3. Baste patches to underlay in arrangement desired, butting all edges.
4. Stitch in lengthwise and crosswise rows, allowing stitches to straddle patches.

FAGGOTING A SEAM



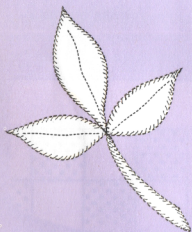
PATCHWORK QUILTING



APPLIQUE




HEMSTITCHED APPLIQUE



APPLIQUE

Applique adds beauty and interest to clothes and household linens. Either contrasting or self fabric can be used effectively.

Satin stitch is used for machine applique. The width of this stitch can be varied to accommodate fabrics of different weaves and textures.

- Position the design.
 - Baste it to the fabric.
 - Attach special purpose presser foot and general purpose needle plate.
1. Set pattern selector at  (plain zig-zag).
 2. Set stitch width at desired setting and set stitch length for satin stitching.
 3. Stitch, outlining the design with zig-zag satin stitching.
 4. Trim any excess fabric on the outer edges of the stitching. Remove basting.

Hemstitched Applique

Designs applied with the slant overedge stitch are especially effective on closely woven, smooth textured, and sheer fabrics when a fine thread and large needle are used to emphasise a hem-stitched effect.

Pattern Selector: 

Flexi-Stitch Dial: Red bar 

Stitch Width: 

Needle Position: 

Stitch Length: Red bar 

Pressure: Light

Tension: To suit fabric

Special Purpose Presser Foot

General Purpose Needle Plate

Speed: Moderate

1. Insert a size 18 needle and thread the machine with a fine mercerized cotton, silk, or synthetic thread.
2. Follow instructions for appliqueing, described above.

DRAWN-THREAD WORK

Pattern Selector: 

Flexi-Stitch Dial: Red bar 

Stitch Width: to suit fabric

Needle Position:   

Stitch Length: Red bar 

Pressure: Light

Tension: To suit fabric

General Purpose or Special Purpose

Presser Foot

General Purpose Needle Plate

Speed: Moderate

Drawn-thread work is a simple decorative treatment that can be used to add interest to table linens, dresses, and blouses. It is accomplished by withdrawing bands of crosswise and lengthwise threads from plain-weave fabrics and accenting the band edges with the slant overedge stitch.

Choose a linen or linen-like fabric from which threads can be easily withdrawn and use a size 18 needle and a fine sewing thread.

Procedure:

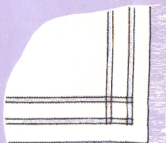
1. Draw one (or more) threads to define each edge of drawn-work bands, as illustrated.
2. Stitch along drawn-thread channel on left and right sides of each band, placing and guiding fabric under the needle so that the straight stitches are made *in* the drawn-thread channel and the sideward stitches (or points) in the body of the fabric *outside* the band. If the fabric is soft, it is advisable to stitch through an underlay of tissue paper.
3. After all stitching is completed, draw out threads between rows of stitching to form open-work bands. At corners, where stitching crosses threads to be drawn, cut threads close to stitching before drawing them out.

To form a fringe, ravel threads between stitching and fabric edges.

DRAWN-THREAD WORK



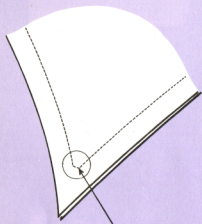
Drawn-Thread Channels



Completed Drawn Work
with Fringed Edges

Hints on sewing special fabrics

LEATHER-LOOK VINYL



Stitch diagonally across the point

LEATHER-LOOK VINYL †

- Use masking tape or zipper adhesive tape instead of pins or basting to hold seams, zippers and hems in place for stitching.
- Stitch with a long stitch (2.5 - 3.5). A short stitch may cut the fabric.
- Sew with a steady, even pace and stitch accurately. Seams cannot be ripped out without leaving needle marks in the fabric.
- The shiny side of some vinyls tends to stick to metal surfaces. Use a strip of tissue paper between the fabric and metal machine surfaces to prevent this. Other remedies include dusting fabric with talcum powder or wiping surface with a damp sponge.
- Reinforce button and buttonhole areas with interfacing. Bound buttonholes are the best choice for vinyls with knit backing.
- Top stitching holds seams and garment edges smooth and flat and adds a decorative note.
- For sharp points on collars and lapels, take one or two stitches diagonally *across* the point to allow enough space to smoothly enclose the seam edge.

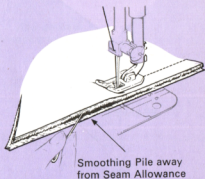
†The Even Feed Foot, available for separate purchase, is designed to aid in sewing this fabric.

DEEP-PILE FABRICS (Fake Fur) †

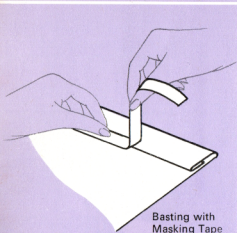
- Pin, rather than baste, seams. Place pins at close intervals at right angles to the seam line. Pins with coloured heads are easy to see and remove.
- Sew in direction of nap.
- Stitch with a fairly long machine stitch (2.5 - 3.5) and use polyester/cotton thread in a size 14 or 16 (Cat. 2020) needle.
- As seam is stitched, smooth pile *away* from seam allowance with a darning needle or upholstery pin.
- After stitching seams with a 1.5cm ($\frac{3}{8}$ ") seam allowance, use small hand scissors to shear pile from entire seam allowance to reduce bulk.
- Stitch 6mm ($\frac{1}{4}$ ") pre-shrunk tape into neckline and shoulder seams for stability and reinforcement or stitch with the straight stretch stitch.
- Leather and leather-look fabrics complement fur fabrics; use them for bound buttonholes and easy button loops.
- Coat hems are less bulky if narrow and finished with a 8cm (3") fabric facing or grosgrain ribbon.
- Slash through the centre fold of darts and finger-press open or stitch with a narrow zig-zag stitch and trim away excess fabric after stitching.

†The Even Feed Foot, available for separate purchase, is designed to aid in sewing this fabric.

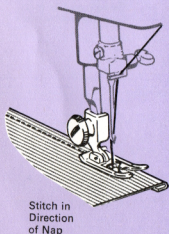
DEEP-PILE FABRICS



SEAMS IN CIRÉ



SEAMS IN VELVET



CIRÉ (Wet-Look Taffeta and Tricot) †

- Do not use pins in any area of the garment that will be visible when completed.
- Use masking tape or zipper adhesive tape instead of pins or basting to hold seams, zippers and hems in place for stitching.
- Stitch accurately; seams cannot be ripped out because needle marks remain in the fabric.
- Sew seams under light tension by holding fabric slightly taut at front and back of needle.
- Stitch ciré taffeta with a fairly long stitch (2.5 - 3.5) and use an enclosed edge finish for seams and hems.
- Stitch ciré knits with a medium-length stitch (2) and use a yellow-band needle.
- Machine-worked buttonholes (as well as bound) can be made in ciré fabric.
- Always use an interfacing and make sure the close zig-zag stitches do not cut the fabric.

VELVET AND VELVETEEN †


- Use a light pressure dial setting to prevent crushing pile.
- Mark and baste with silk thread. Use a Cat. 2020, size 11 needle and a fine thread for seaming. For velvet, '60' silk or nylon thread is recommended.
- Always stitch in the direction of the nap. For unpuckered seams, pin or hand baste together and then stitch under light tension (see page 20). Extra long straight seams may be machine basted with a long wide zig-zag stitch.
- To sew panne velvet, use a yellow-band needle and a shorter-than-normal stitch length (1.5 - 2).

†The Even Feed Foot, available for separate purchase, is designed to aid in sewing these fabrics.

Keeping up appearances

TEARS

Multi-stitch zig-zag forms a firm, flexible bond for repairing tears.

Pattern Selector: 

Flexi-Stitch Dial: 0

Stitch Width: 

Needle Position: 

Stitch Length: To suit fabric

Pressure: To suit fabric

Tension: To suit fabric

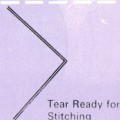
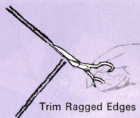
General Purpose Presser Foot

General Purpose Needle Plate

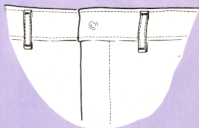
1. Trim ragged edges.
2. Place underlay on wrong side of tear for reinforcement. Do not baste.
3. Stitch on right side, bringing edges of the tear together.
4. Shorten stitch length at ends and corners to give extra strength.
5. Trim underlay.

NOTE: For mending tears in stretch materials it is best to use a *Flexi-Stitch*.

MENDING



BAR-TACKED BELT LOOPS

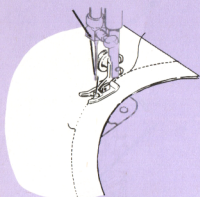


MENDING

Bar Tacks

Bar tacks, to reinforce points of strain, are made with the plain zig-zag stitch at satin stitch length. Use them at pocket corners, to attach garters, secure shoulder straps, belt loops and zipper openings.

SEAM REPAIR

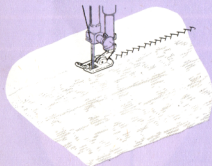


Repairing Seams

Breaks in press-open garment seams can be repaired quickly and easily when you use the straight stretch stitch. This reinforced straight stitch produced at | stitch width setting (*Flexi-Stitch* dial at red bar) is both strong and flexible. It is ideal for knit and stretch fabrics, and particularly useful for repairing or strengthening curved seams, or seams that will receive strain when worn.

1. Make a test sample to check dial settings.
2. Remove loose thread along the break and press seam edges together.
3. Overlapping stitching 2.5cm (1") at each end, stitch along original seam line. Guide seam under presser foot without stretching fabric, letting the machine move the fabric to make the back-and-forth stitches that give *s-t-r-e-t-c-h* to the seam. Press seam open.

STRETCH GARMENT REPAIR



Repairing Stretch Garments

Pattern Selector:

Flexi-Stitch Dial: Red bar |

Stitch Width: |

Needle Position:

Stitch Length: Red bar —

Pressure: To suit fabric

Tension: To suit fabric

General Purpose Presser Foot

General Purpose Needle Plate

Speed: Moderate

Seams in stretch garments and lingerie retain their elasticity when stitched with the faggoting stitch. This stitch pattern builds *s-t-r-e-t-c-h* into the seam as it is being sewn and is equally suitable when used to top-stitch (as shown) or to overedge. Make a test sample to check dial settings and to adjust the stitch balance.

Worn or torn spots on children's clothes, knits, and household linens can be darned effortlessly and quickly with a little practice. You may choose to darn with or without an embroidery hoop. When greater control is needed, an embroidery hoop is usually best.

(The Darning and Embroidery Hoop is available for separate purchase at your local Singer Sewing Centre.)

Darning without Embroidery Hoop

Flexi-Stitch Dial: 0

Stitch Width: 

Needle Position: 

Stitch Length: Optional 1-4

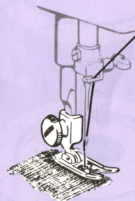
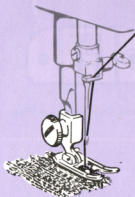
Pressure Dial: 

General Purpose Presser Foot

General Purpose Needle Plate

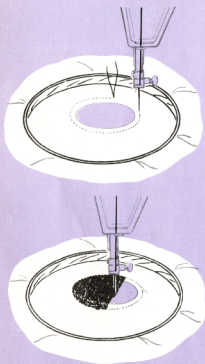
1. If area to be darned is open, baste an underlay in place.
2. Place area to be darned under presser foot.
3. Lower presser foot and start stitching, alternately drawing fabric toward you and pulling it gently away from you.
4. Continue this forward and backward motion as you fill the area with parallel lines of stitching.
5. For additional strength, cover area with crosswise lines of stitching.

DARNING





Feed Cover Needle Plate



Darning with Embroidery Hoop†

Pattern Selector: Any setting

Flexi-Stitch Dial: 0

Stitch Width: [] } ~ ~ ~ ~

Needle Position: [] [] []

Stitch Length: 1-0

Feed Cover Needle Plate

No Presser Foot

Presser Bar: Lowered

Preparation

Remove presser foot with shank and attach feed cover needle plate. Instructions for changing the needle plate are given on page 8.

1. Trim ragged edges from area to be darned.
2. Centre worn section in embroidery hoop.
3. Position work under needle over feed cover plate and *lower presser bar to engage tension*.
4. Hold needle thread loosely with left hand, turn hand wheel over and draw bobbin thread up through fabric. Hold both thread ends and lower needle into fabric.
5. Outline area to be darned with running stitches for reinforcement.
6. Stitch across opening, moving hoop under needle at a slight angle from lower left to upper right. Keep lines of stitching closely spaced and even in length.
7. When opening is filled, cover area with crosswise lines of stitching.

This method of controlling fabric movement with an embroidery hoop may be used to do embroidering or monogramming.

†The Darning and Embroidery Hoop is available for separate purchase at your Singer Sewing Centre.

Caring for your sewing machine

CAUTION: Disconnect power-line plug from electrical supply before cleaning your machine or removing top cover, bottom cover, carrying case base or bobbin case.

Your sewing machine is a fine yet sturdy precision instrument which will serve you perfectly for many years if you take a few simple steps to keep it in good condition.

Periodically

Remove lint and fluff from exposed parts. With a soft cloth, clean:

- Tension discs.
- Take-up lever and thread guides.
- Presser bar and needle bar. (For instructions on removing and replacing arm top cover, see page 60.)
- Machine surface (arm and bed).
If necessary, a mild solution of soap in water may be used to remove stubborn stains on face plate; *never use strong solutions or abrasives.*

With a lint brush, clean:

- Behind face plate.
- Bobbin area

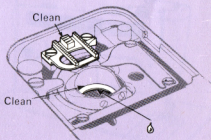
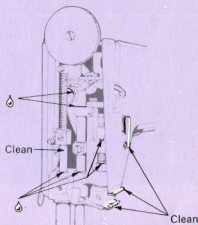
(For instructions on removing and replacing face plate and bobbin case, see page 62.)

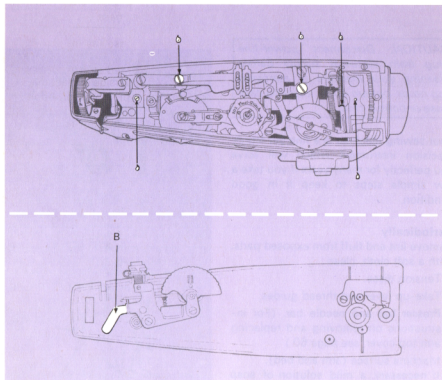
After each cleaning apply a drop (but no more than a drop) of SINGER*oil† to the areas shown. Sew on a scrap of material to remove excess oil.

†SINGER oil is available for purchase at your Singer Sewing Centre.

Clean Between
Tension Discs

Clean

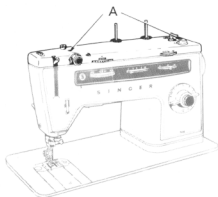




EVERY FEW MONTHS

Lubricate parts under the top cover.

- **To remove**, loosen and remove screws A and lift off top cover.
- Apply a drop of SINGER oil where indicated.
- **To replace**, ensure lever B is against arm top cover to eliminate possibility of damage. Position cover on top of machine and replace and tighten screws A.

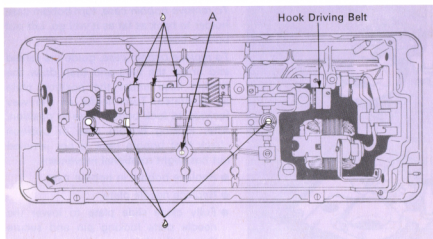


Lubricate parts under bottom cover.

CAUTION: Remember to disconnect power-line plug from electrical supply before removing bottom cover or carrying case base.

If your machine is a portable, remove the carrying case base (as instructed below).

- Tilt machine back and remove retaining nut from threaded stud A, being careful not to lose felt washer, and remove cover from underside of machine.
- Oil places indicated. Avoid getting oil on any part of motor or hook driving belt.
- Replace bottom cover, felt washer, and retaining nut. Tighten retaining nut with a screwdriver.



MOTOR REQUIRES NO LUBRICATION

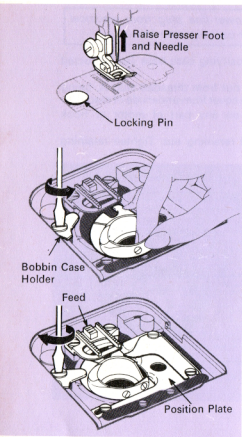
REMOVING AND REPLACING CARRYING CASE BASE

- Turn machine so that back is toward you. Tilt head back and loosen and remove retaining nut in centre.
- Set machine upright and lift up and out of base.
- Replace machine in base, after bottom cover has been attached, making sure machine bed is fully recessed.

- Turn machine so that back is toward you; tilt back and replace retaining nut. Tighten retaining nut with a screwdriver.

SPECIAL CARE

If the machine is to be stored or before extended periods of inactivity, clean and apply SINGER oil to all moving machine connections to protect metal parts.



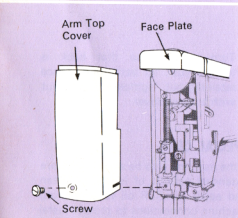
Removing and Replacing Bobbin Case

- Raise the presser foot.
- Turn hand wheel toward you until needle is above the presser foot.
- Remove needle plate as instructed on page 8.
- Remove bobbin.

To remove bobbin case, turn bobbin case holder to back as far as it will go. Lift out bobbin case.

To replace bobbin case, guide the forked end under the feed and then draw the bobbin case under the position plate as illustrated. Turn holder all the way forward to lock bobbin case in position. After locking bobbin case in position check that bobbin case is not jammed but has slight rotational movement.

- Replace bobbin in bobbin case.
- Replace needle plate.
- Fully close slide plate to lower the needle plate locking pin and secure the needle plate.



Removing Face Plate

- Loosen and remove screw and remove face plate by sliding it downward.

Replacing Face Plate

- Slide face plate up so that rim is engaged under edge of arm top cover.
- Align screw hole at lower edge of plate with screw hole in machine and replace and tighten screw.

CHANGING THE LIGHT BULB

CAUTION: Disconnect power-line plug from electrical supply before removing light bulb.

- Lower light bracket with finger grip.

Removing the Bulb:

Do not attempt to unscrew bulb. Press it up into socket and turn it in 'unlock' direction, as shown, and withdraw.

Replacing the Bulb:

Press new bulb into socket, with bulb pin entering slot of socket, and turn it over in 'lock' direction shown to lock bulb in position. Push bracket back into recess.

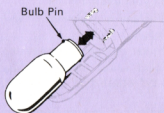
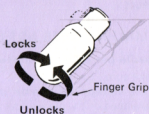
This machine is designed to use a 20 watt maximum light bulb.

REPLACING THE SLIDE PLATE

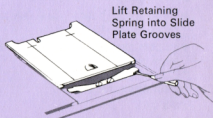
You will not have any occasion to remove the slide plate. However, if it should accidentally become disengaged from the machine, it is easily replaced.

- Raise the presser foot and the needle.
- Place slide plate in slide way with the front edge close to, but not covering, the retaining spring (as shown).
- With a screwdriver, lift each end of the spring into each of the side grooves on the underside of the plate.
- Draw the plate gently toward you and fully engage the spring.
- Close slide plate.

CHANGING THE BULB



REPLACING THE SLIDE PLATE



Hints for home service

Whenever sewing difficulty is encountered, review the sections of the instruction book that explain the operation that you are performing to make sure you are using the machine properly. If the problem still exists, the following hints will help you to correct it.

MACHINE DOES NOT SEW

Needle bar does not move

Make sure . . .

- The voltage and number of cycles stamped on the plate under the hand wheel are within the range marked on your electric meter.
- Machine is connected to electrical supply.
- Power and light switch is on.
- Hand wheel disc is engaged, or hand wheel knob is tightened.

Needle bar moves but stitch is not formed

Make sure . . .

- Needle is straight and sharp.
- Needle class is correct for machine.
- Needle size is correct for the thread you are using.
- Machine is correctly threaded.
- Bobbin contains thread.
- Bobbin and bobbin case are correctly inserted in machine.
- Bobbin case area is free of lint and loose thread ends.

Fabric does not move

Make sure . . .



- Presser foot is down (particularly when you are sewing dense fabric).

Pressure dial is adjusted for the weight and texture of your fabric.

- Stitch length dial is properly set.
- Feed cover plate has been replaced with the correct needle plate for the stitching you are doing.
- All lint is removed from around feed.

Needle breaks

Make sure . . .

- Needle is correct for machine, and proper size for the thread you are using.
- Needle is fully inserted in needle clamp.
- Stitch width selector is at  and needle position selector is at  when you are using the straight stitch foot and needle plate.
- Stitch width setting does not exceed mid-way setting when a twin needle is being used.
- Presser foot or accessory is securely fastened to presser bar.
- Needle plate is positioned under locking pin, located on position pin and slide plate is fully closed.
- Fabric is not pulled to one side as you remove work from the machine.
- Fabric being guided or supported behind the needle is not being pulled too hard or too fast.

BUTTONHOLING DIFFICULTIES

Irregular stitches occur

Make sure . . .

- *Flexi-Stitch* dial is set at 0.
- Stitches are balanced as instructed under "Buttonholing".

BOBBIN WINDING DIFFICULTIES

Thread does not wind correctly on to bobbin

Make sure . . .

- Bobbin winder switch is turned to "WIND" position.
- Bobbin is pushed in all the way on the spindle.

STITCHING DIFFICULTIES

Irregular stitches occur

Make sure . . .

- *Flexi-Stitch* dial is set at 0 when straight or zig-zag stitching.
- *Flexi-Stitch* dial is balanced when sewing *Flexi-Stitch* patterns.

Needle thread breaks

Make sure . . .

- Machine is correctly threaded.
- Thread is free from slubs and knots.
- Needle is correct size for thread.
- Needle is straight and sharp.
- Needle thread tension is not too tight.
- Bobbin thread is wound evenly.
- Bobbin case is correctly threaded and properly inserted.
- Needle plate and presser foot are undamaged.
- Threads are correctly placed under presser foot when you start to sew.
- Presser foot is securely fastened to presser bar.

Bobbin thread breaks

Make sure . . .

- Bobbin has been correctly wound.
- Bobbin case is correctly threaded and properly inserted.
- Bobbin or bobbin case has not been damaged.
- Bobbin case area is free of lint.

Skipped stitches

Make sure . . .

- Needle is straight and sharp.

- Needle is correct class for machine and size for thread.

- Machine is correctly threaded.

- Fabric is held down firmly (particularly when you are doing free-motion darning and embroidery).

Loose stitches on underside of fabric

Make sure . . .

- Needle is straight and sharp.
- Needle is correct class for machine and size for thread.
- Sufficient tension is being exerted on needle thread.
- Bobbin case area is free of lint.
- Presser bar has been lowered (particularly when you are sewing dense fabrics or doing free-motion darning and embroidery).

Fabric does not lie flat after stitching

Make sure . . .

- Needle-thread tension is not too tight.
- There is sufficient presser foot pressure to hold fabric.
- Stitch length is short enough for fabric.
- Correct presser foot is being used.
- Machine is correctly threaded.

PRESSURE DIAL DIFFICULT TO ADJUST

Make sure . . .

- Presser foot is *down* before rotating dial.

SLUGGISH/NOISY MACHINE

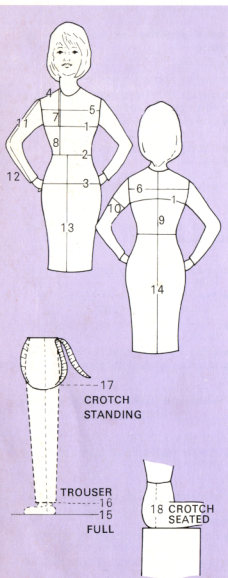
Make sure . . .

- Bobbin case and feed area is free of lint and loose thread ends.
- Machine is lubricated periodically.

Your personal measurement chart

This chart will enable you to keep a record of your measurements. You will need the assistance of someone to help you take the measurements carefully with an accurate tape measure.

The figures (below) show where the tape measure should be placed when taking each measurement.



c.m. (inches)

1. BUST—*Fullest part—slightly higher in back*
2. WAIST—*Around natural waistline*
3. HIP—*..... inches below natural waistline (fullest part)*
4. SHOULDER—*From base of neck to top of arm*
5. FRONT BODICE WIDTH—*From armhole to armhole 5" (12.70 c.m.) down from centre shoulder*
6. BACK BODICE WIDTH—*From armhole to armhole 4" (10.16 c.m.) down from centre shoulder*
7. SHOULDER TO BUST—*From neck base at shoulder to a line even with point of bust*
8. FRONT WAIST LENGTH—*From neck base at shoulder over fullest part of bust to waistline*
9. BACK WAIST LENGTH—*From the prominent bone at base of neck to natural waistline*
10. SLEEVE WIDTH—*Around arm at upper edge of underarm seam*
11. SLEEVE LENGTH—*Shoulder to elbow*
12. SLEEVE LENGTH—*Elbow to wrist*
13. FRONT SKIRT LENGTH—*Down centre from waistline to hem*
14. BACK SKIRT LENGTH—*Down centre from waistline to hem*

TROUSER MEASUREMENT CHART

15. FULL LENGTH—*Waist to floor at side seam*
16. TROUSER LENGTH—*Waist to ankle*
17. CROTCH SEAM (standing)—
18. CROTCH DEPTH (seated)—*Waist to chair at side seam*

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